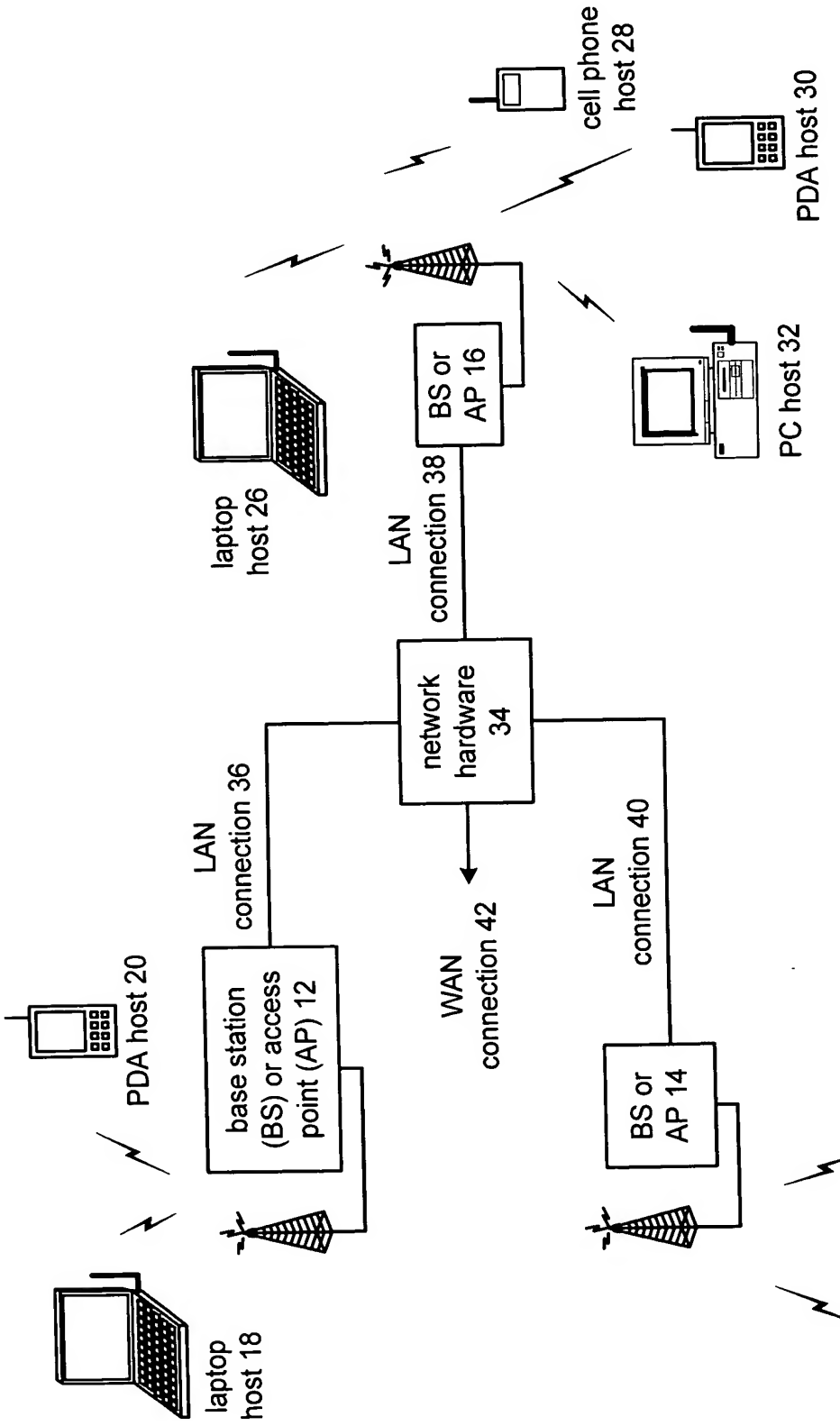

FIG. 1 communication system

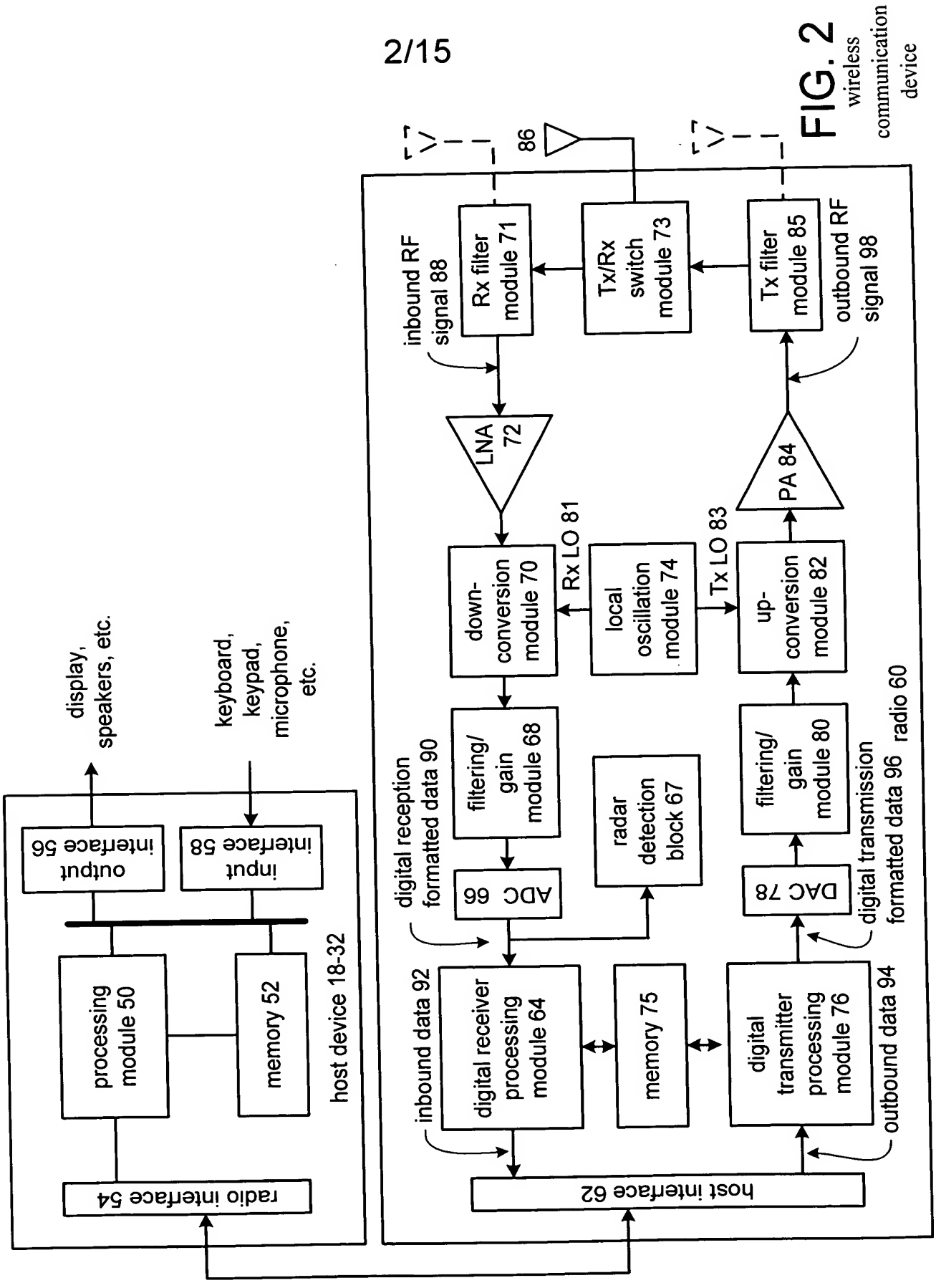
wireless communication device
host device 18-32
processing module 50
memory 52
radio interface 54
input interface 58
output interface 56
display, speakers, etc.
keyboard, keypad, microphone, etc.
radio 60
host interface 62
digital receiver processing module 64
memory 75
digital transmitter processing module 76
inbound data 92
outbound data 94
ADC 66
DAC 78
filtering/ gain module 68
filtering/ gain module 80
digital reception formatted data 90
digital transmission formatted data 96
radar detection block 67
down-conversion module 70
up-conversion module 82
local oscillation module 74
Rx LO 81
Tx LO 83
LNA 72
PA 84
Rx filter module 71
Tx/Rx switch module 73
Tx filter module 85
inbound RF signal 88
outbound RF signal 98
86

FIG. 2

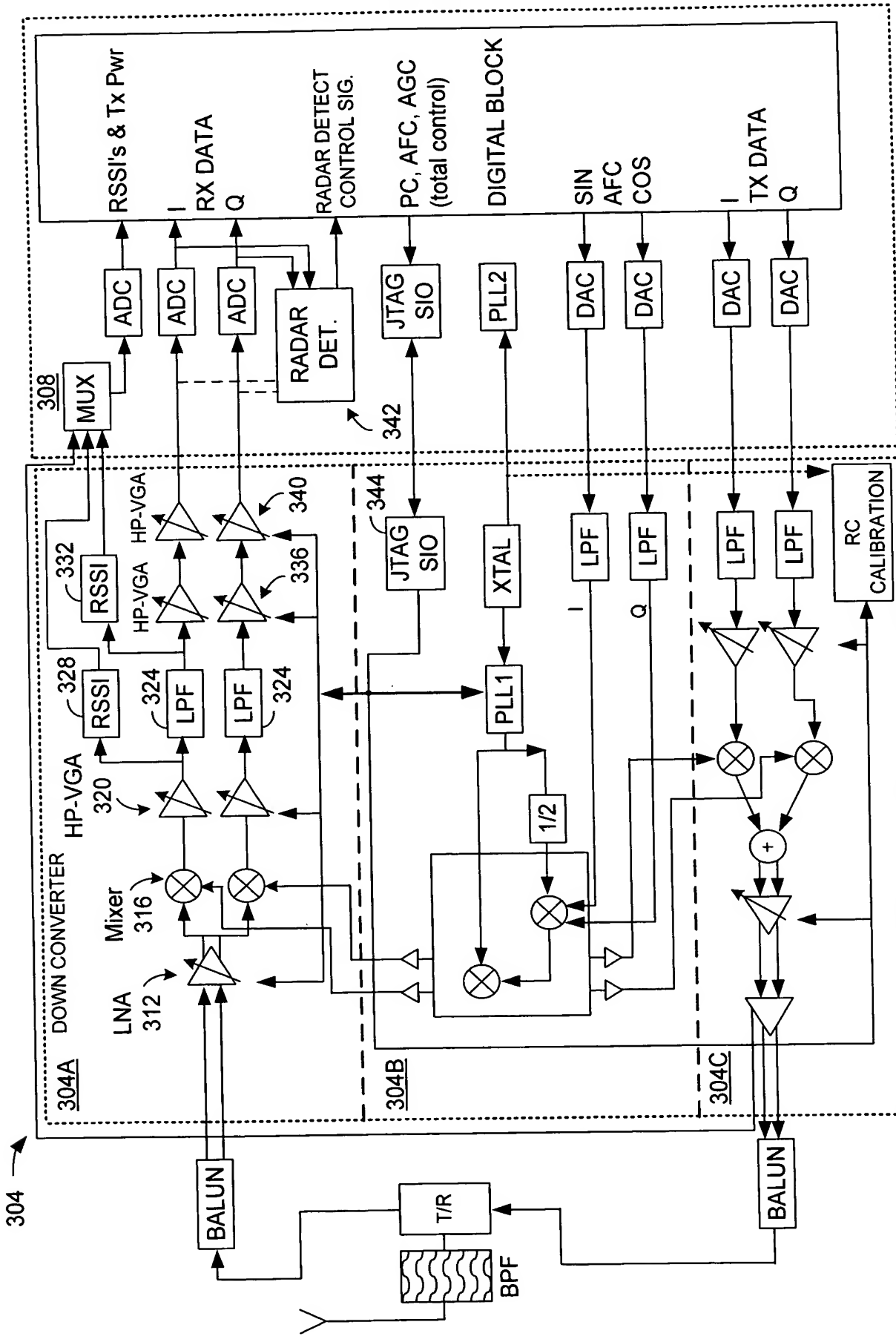

FIG. 3 direct conversion radio transceiver

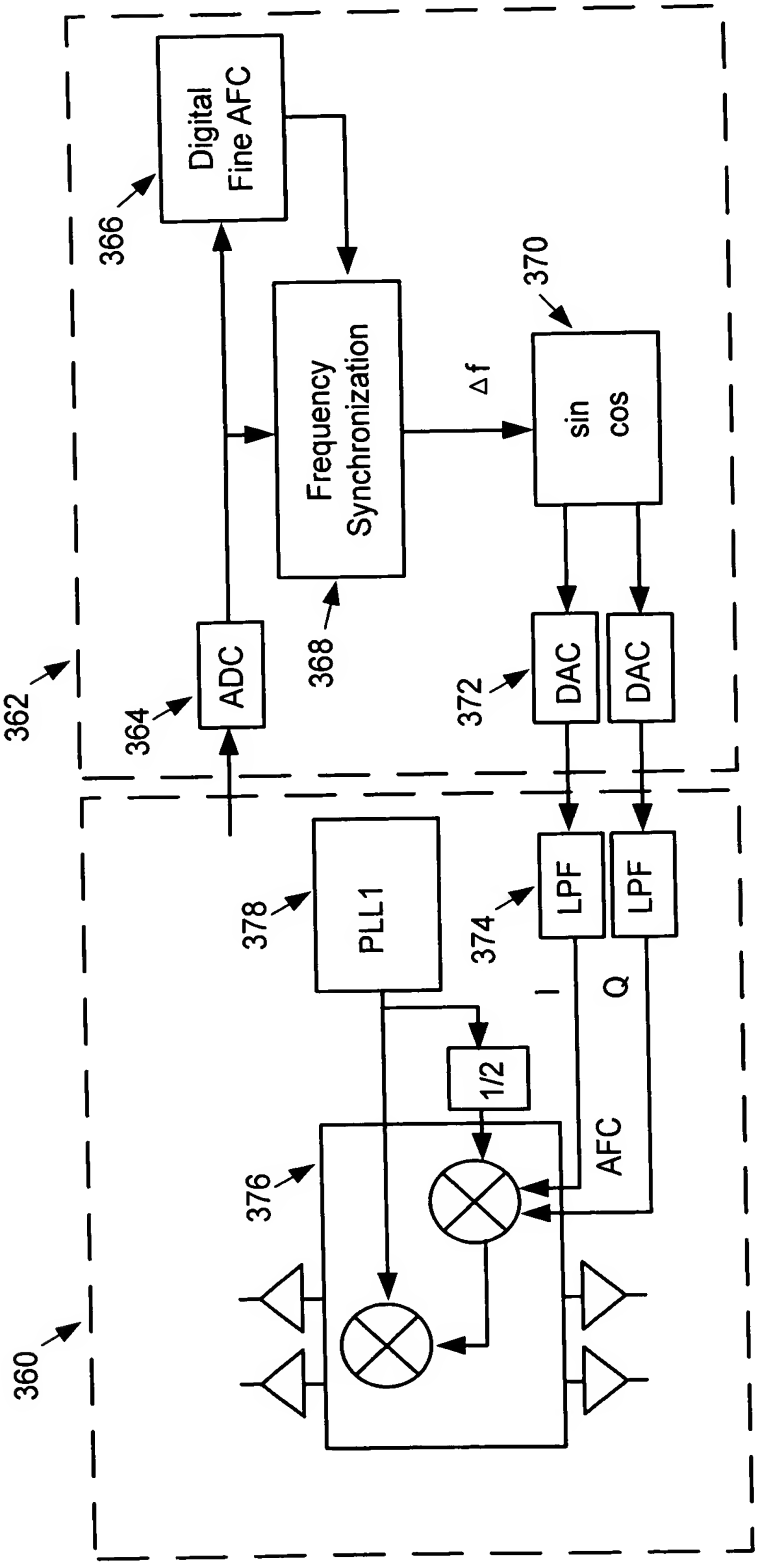

FIG. 4 receiver automatic frequency control circuit

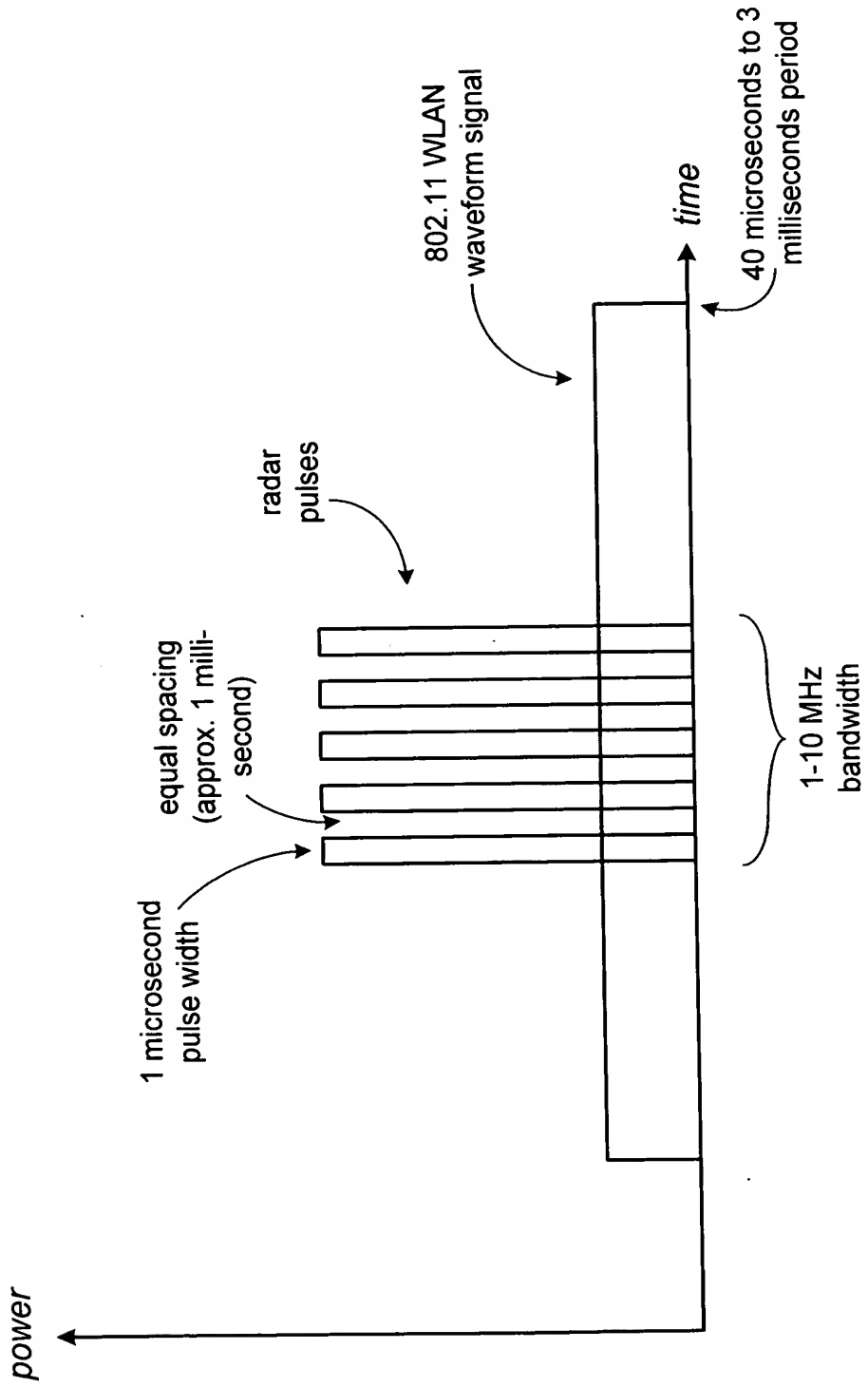

FIG. 5 radar and WLAN signals

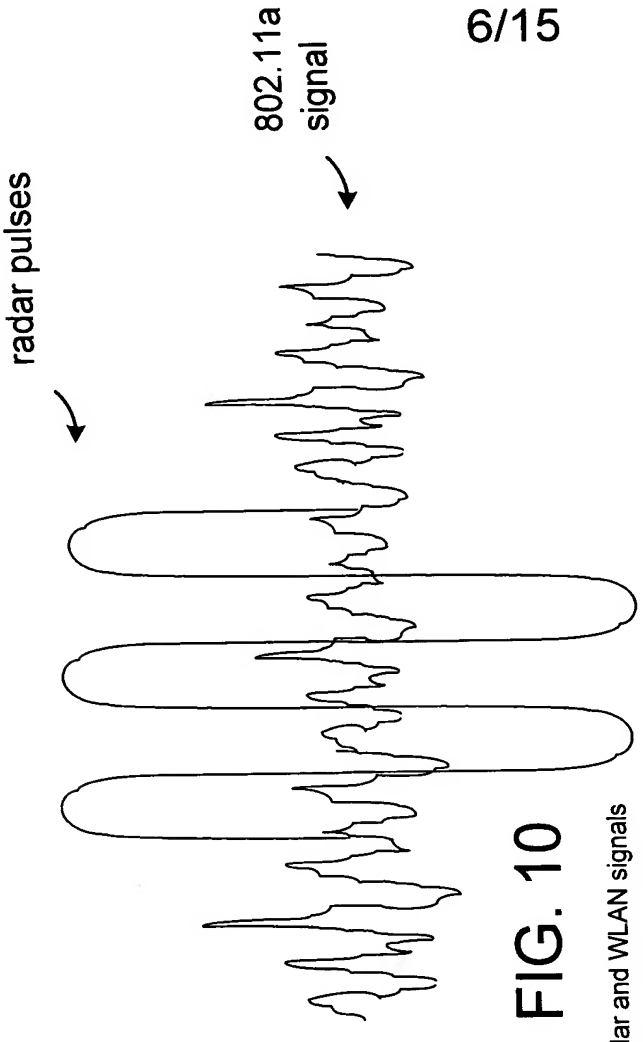

FIG. 10 radar and WLAN signals

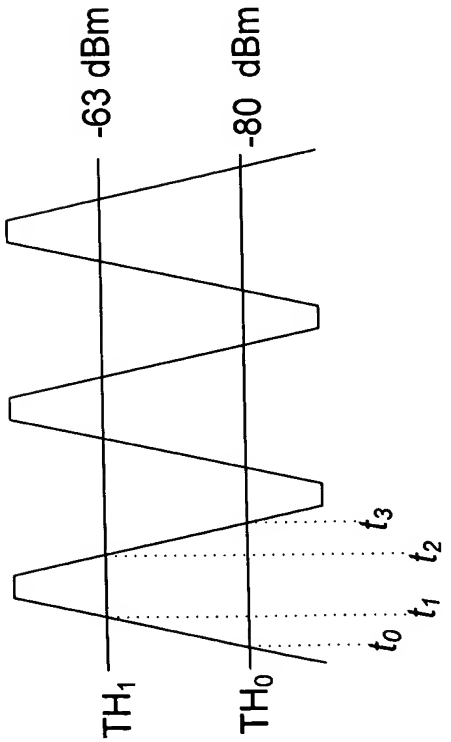

FIG. 7 radar pulse reception

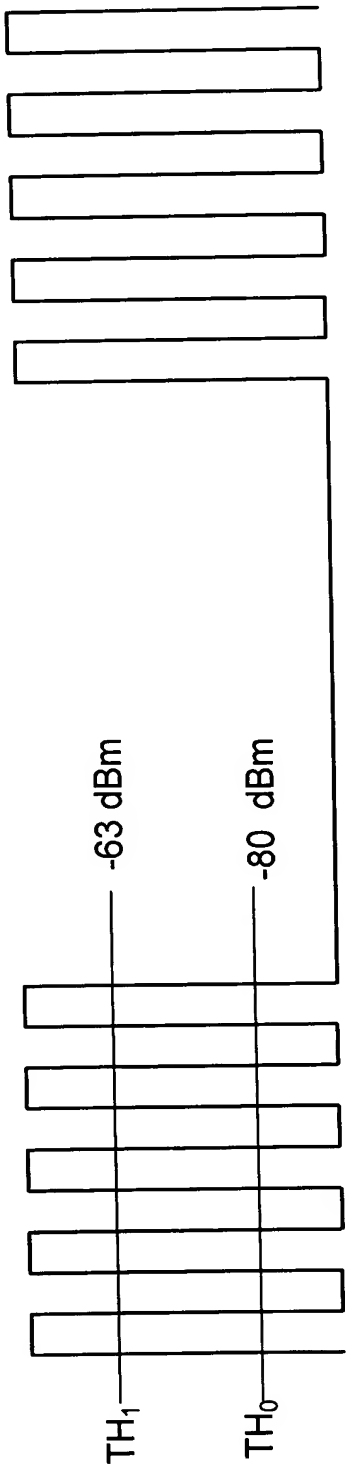

FIG. 6 groups of radar pulses

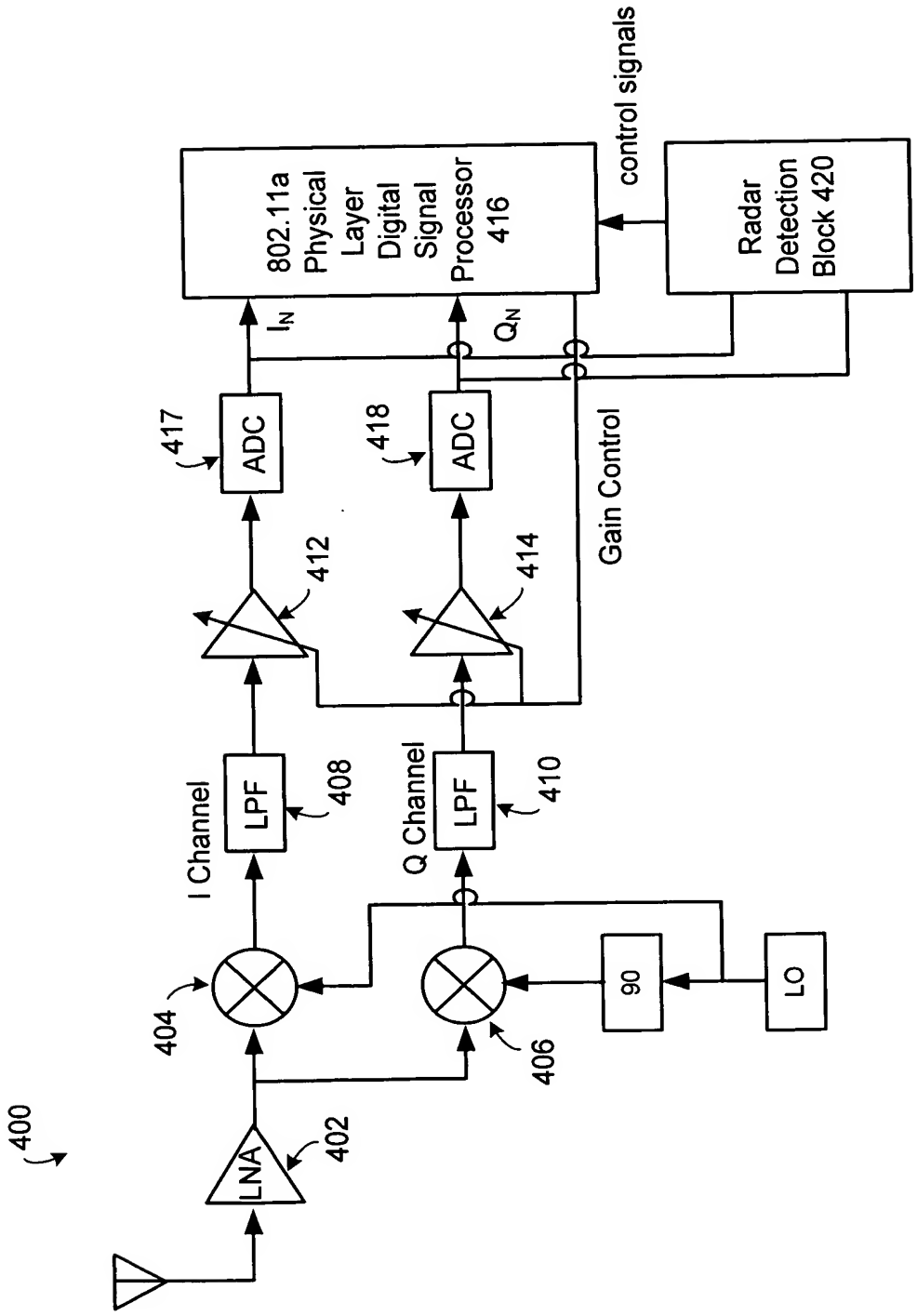

FIG. 8 receiver with radar detection block

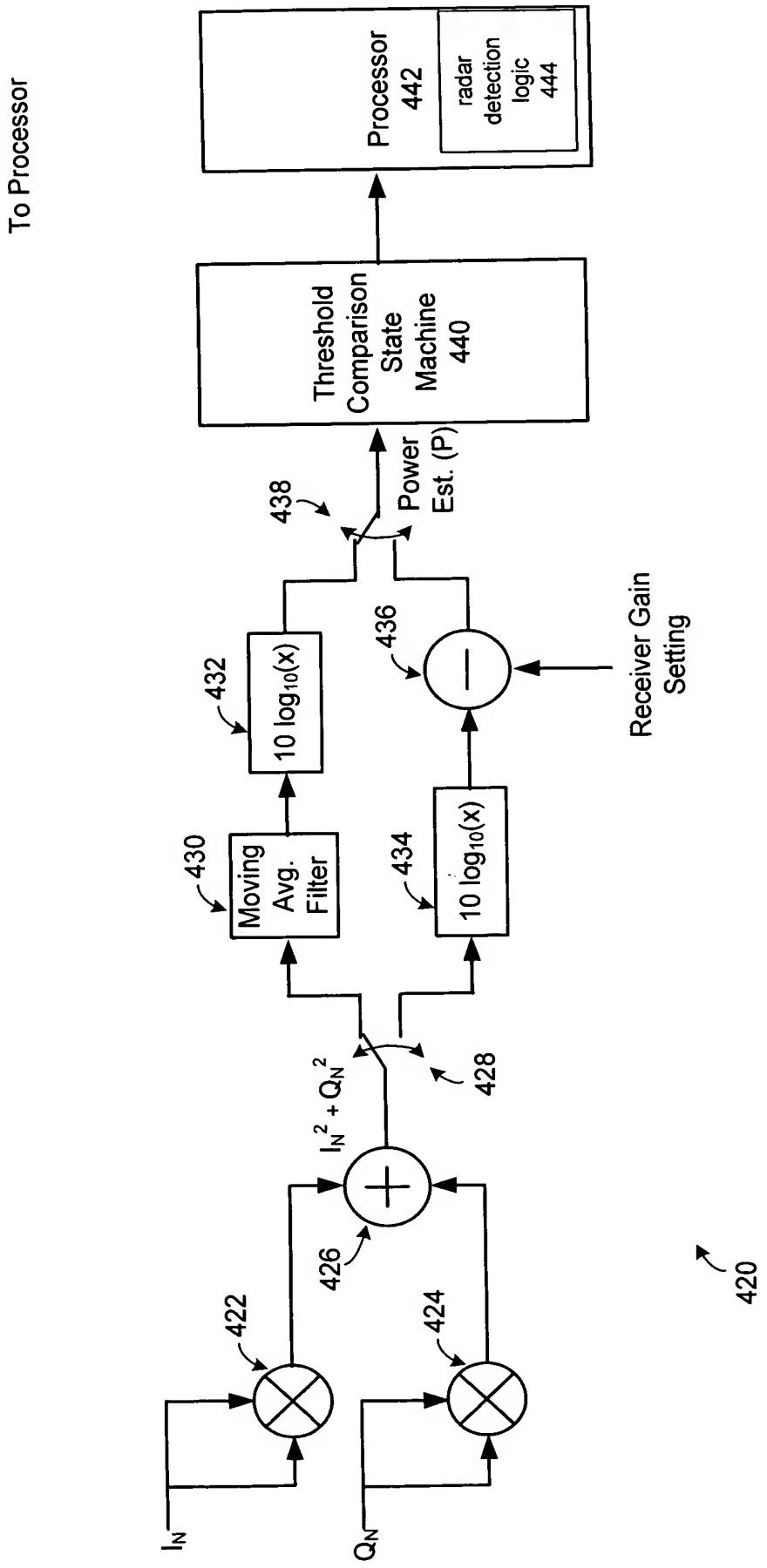

FIG. 9 radar detection logic

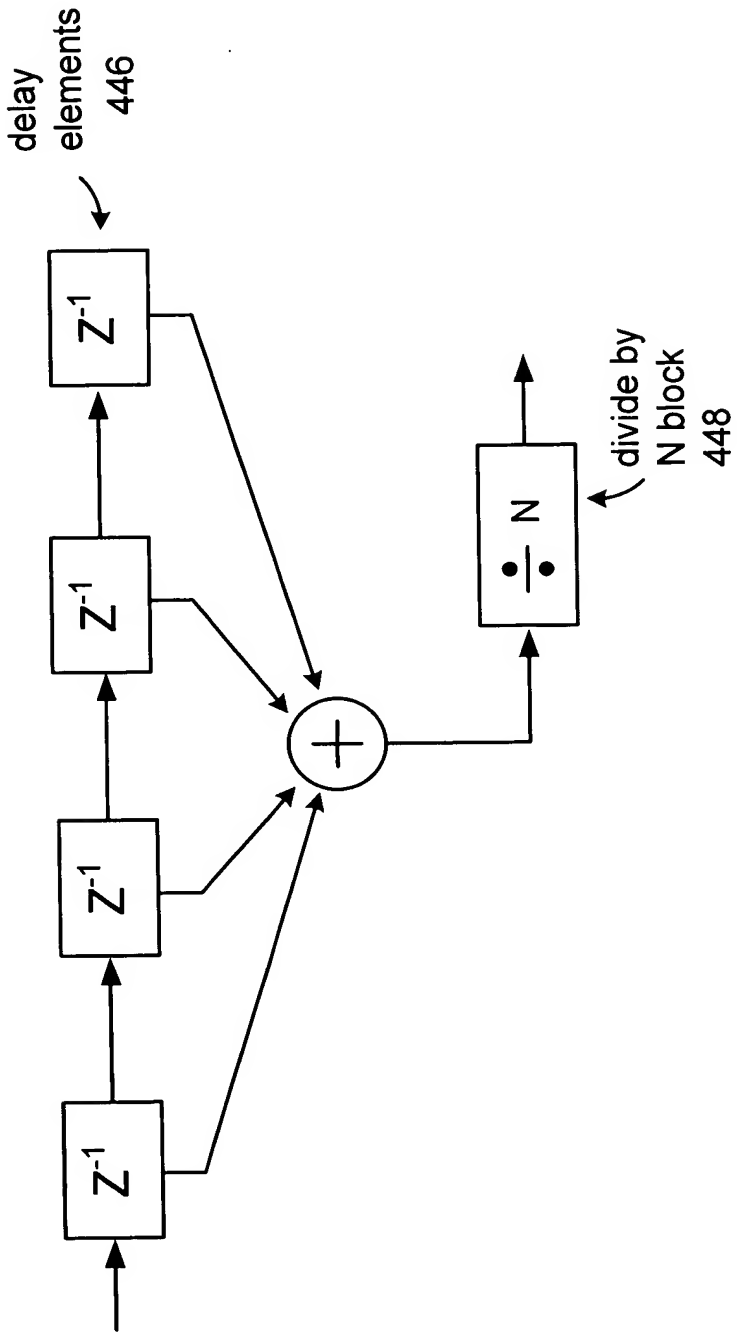

FIG. 11 moving average determination logic

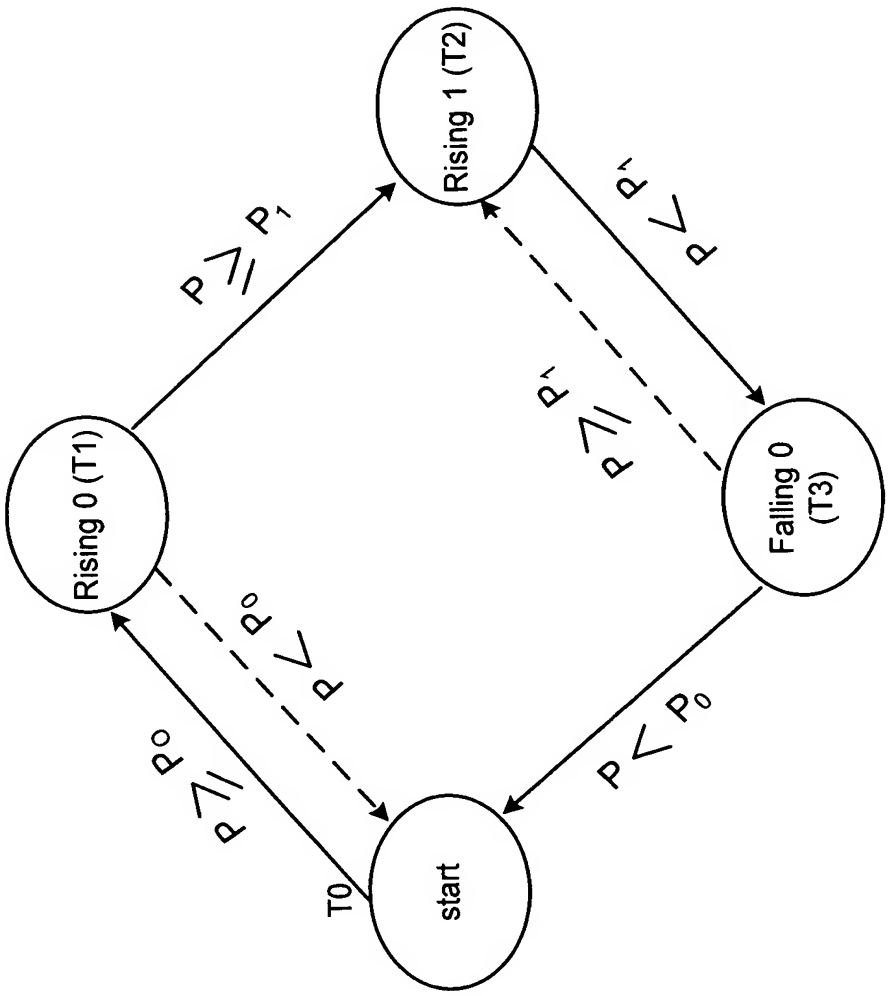

FIG. 12 state machine for detecting radar pulses

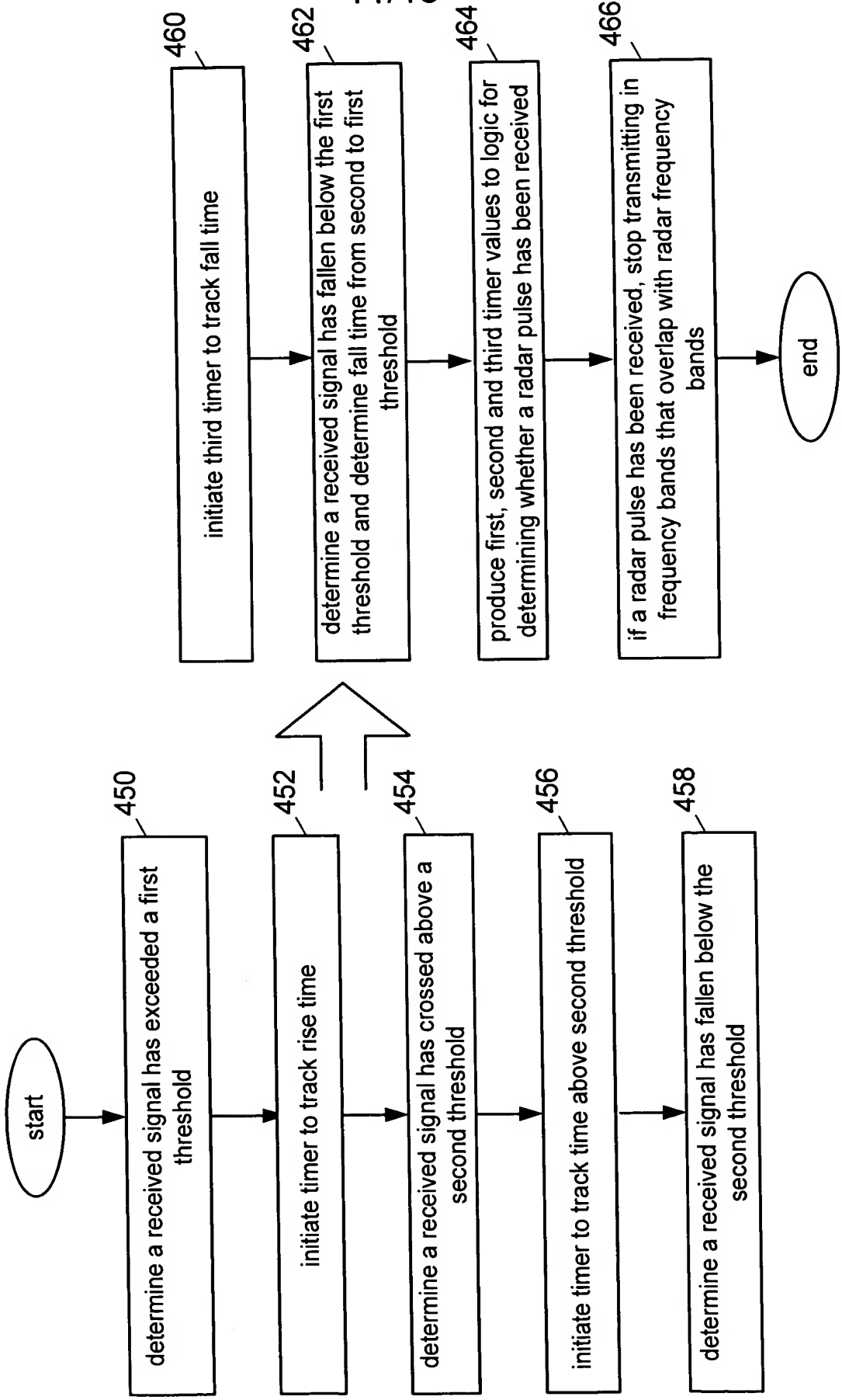

FIG. 13 method for determining if a radar pulse has been received

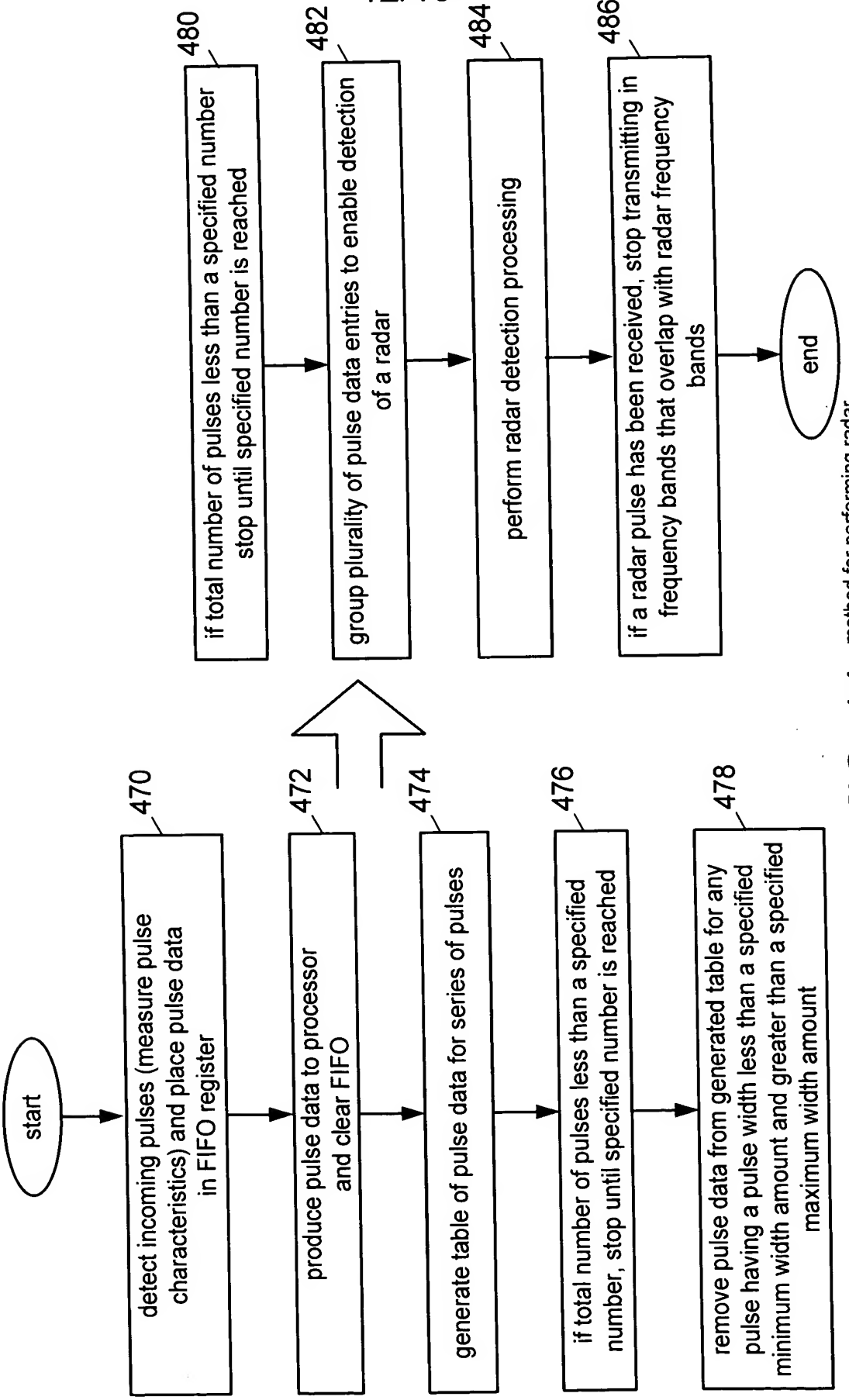

FIG. 14 method for performing radar detection processing

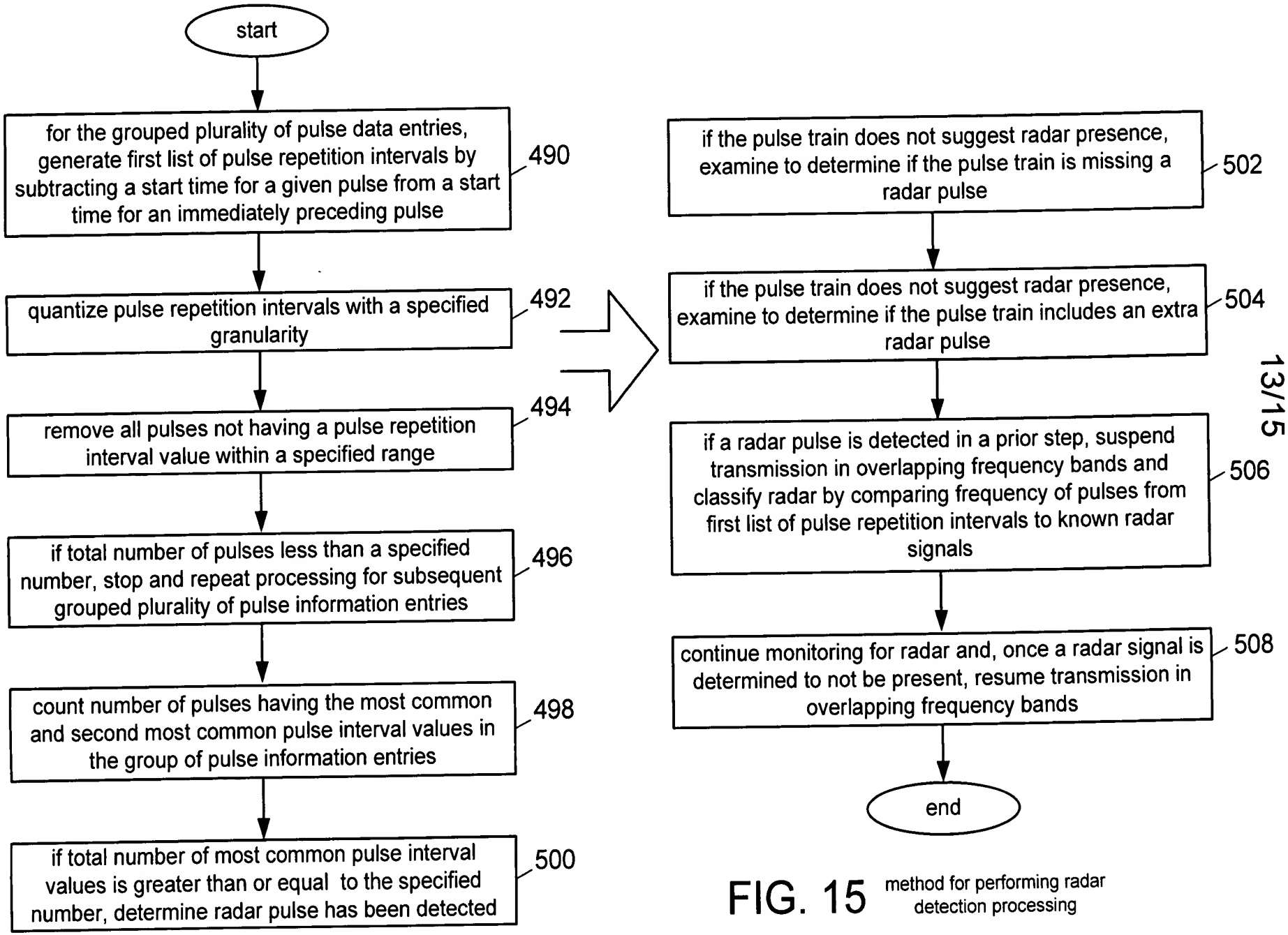

FIG. 15 method for performing radar detection processing

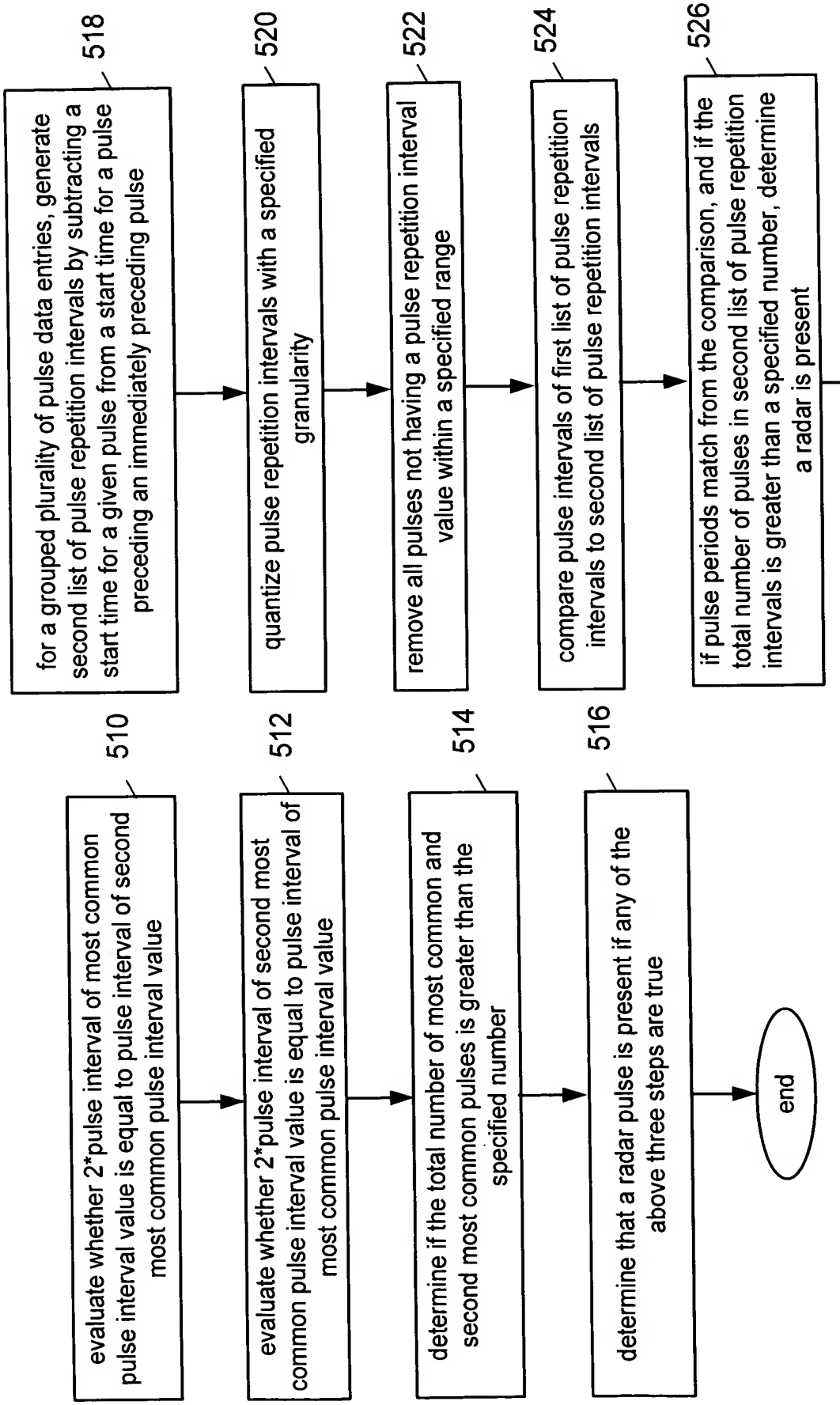

FIG. 16 method for performing radar detection processing for missing pulses

FIG. 17 method for performing radar detection processing for extra pulses

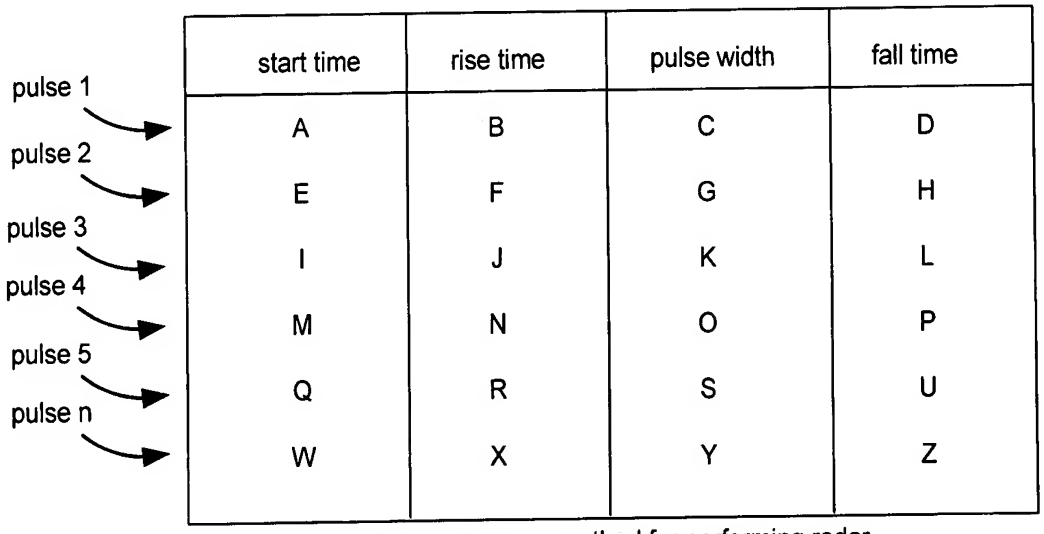

FIG. 18 method for performing radar detection processing

pulse interval	pulse interval quantity by type	
E – A	n1	E – A
I – E	n2	I – E
M – I	n3	M – I
Q – M	n4	Q – M
W - Q	n5	W - Q

FIG. 19 method for performing radar detection processing for missing pulses

pulse interval	pulse interval quantity by type	
I – A	n1	I – A
M – E	n2	M – E
Q – I	n3	Q – I
W - M	n4	W - M

FIG. 20 method for performing radar detection processing for extra pulses